

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

U-2S, S/N 80-1082

SOUTHWEST ASIA

22 JUNE 2005

On 22 June, at approximately 0315 local (21/2315 Zulu), a U-2S, S/N 80-1082 crashed 17 miles south of its forward operating location in Southwest Asia. The mishap aircraft (MA) and mishap pilot (MP) were part of the 380th Air Expeditionary Wing, assigned to the 99th Expeditionary Reconnaissance Squadron, 9th Reconnaissance Wing, Beale Air Force Base, California, and was returning from an operational high altitude mission. The MA impacted uninhabited desert and was destroyed. The MP did not attempt to eject and died at impact. No one on the ground was injured, and no private property was damaged.

Due to the lack of a cockpit voice recorder and aircraft data recorder, the profile of the final 20 minutes of the mission was reconstructed using radar data, voice transmissions, and a handheld GPS that was recovered from the wreckage. Last contact with the MP occurred at 0307L, 8 minutes prior to impact as he descended below 22,000 ft and acknowledged being cleared to 2,000 ft. At 0314L, at 4,400 ft, the MP began a 70 degree turn to intercept the 17 mile arc on the published arrival. Radar data indicated the MA had intercepted the arc and continued descending below 2,000 ft until radar track was lost at 0315:24L. The mishap sequence began in the last 63 seconds of flight.

There is clear and convincing evidence that the primary cause of the mishap was a catastrophic, cascading sequence of events beginning with vibrations and the in-flight failure of the power takeoff shaft (PTS). This resulted in an instantaneous loss of power to the Airframe Mounted Accessory Drive (AMAD) and the immediate loss of hydraulics, AC and DC generators, primary cockpit lighting, and cockpit multifunction displays (MFDs), during a descending turn, below 3,500 feet AGL, and during a critical phase of flight--arrival routing for a night landing.

There is substantial evidence to conclude that the vibration and noise caused by the in-flight failure of the PTS, followed by the immediate loss of MFDs, led the MP to conclude he was experiencing a serious engine malfunction when in fact he had an operating engine and a flyable jet. Substantially contributing human factors of task oversaturation, channelized attention, and spatial disorientation led to the MP's loss of situational awareness and the steady descent of the MA until ground impact.

Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.